



Public Input No. 3-NFPA 1700-2023 [Chapter 4 [Title Only]]

General Background

Additional Proposed Changes

<u>File Name</u>	<u>Description</u>	<u>Approved</u>
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Statement of Problem and Substantiation for Public Input

NOTE: This Public Input appeared as "Reject but Hold" in Public Comment No. 32 of the (F2019) Second Draft Report for NFPA 1700 and per the Regs. at 4.4.8.3.1.

This entire chapter as it is currently written talks about the background of the research and this standard. I propose changing the title to "Background" and adding "General" chapter. Under the "General" title should be other information regarding the use of this standard within fire ground operations, along with policy and guideline development.

It is crucially important that fire officers understand where strategies and tactics fit in to the larger picture and how we arrive at our tactical decision making. When I teach strategies and tactics I start at the top and work my way down for the best level of understanding. Please consider adding a paradigm such as the following:

Mission Statement: The written mission of the organization. Most departments include the preservation of life and property within their mission statement. Civilians expect this; firefighters should know it.

Incident Priorities:

- 1) Life safety: Both civilians and firefighters
- 2) Incident stabilization: stopping the incident from expanding an escalating
- 3) Property conservation and environmental protection

Risk Vs. Reward

"Risk a lot, in a calculated manner, to save a savable life"

"Risk some, in a calculated manner, to save savable pets, property, and to stabilize the incident" "Risk nothing when there is nothing to save"

It is with these three: Mission Statement, Incident Priorities, and a good Risk vs. Reward analysis that we can begin to determine which strategy is appropriate for the incident.

Strategy level:

- 1) Offensive
- 2) Defensive
- 3) Non-intervention
- 4) Note that strategies may change throughout the incident

Tactic level:

- 1) Fire attack - interior a)direct
b)indirect
- 2) Fire attack - exterior a)direct
b)indirect
- 3) Fire attack - transitional
- 4) Fire attack - blitz attack

- 5) Fire attack - exposure protection
- 6) Fire attack - egress protection
- 6) Search - primary
- 7) Search - vES
- 8) Search - TIC oriented
- 9) Search - split
- 10) Vent - horizontal passive
- 11) Vent - horizontal PPV
- 12) Vent - hydraulic
- 13) Vent - vertical

Task level:

Example of different tasks found within the tactic of vertical ventilation: Milwaukee cut or the 7-9-8 coffin cut, sounding the roof, deploying the roof ladder. These are all "tasks" and there are too many of them to list in this standard but explaining that multiple tasks make up each tactic is important to note.

Also the "General" chapter would be a good place to cite using the ICS system. Using the ICS system should be a very standard aspect of structural firefighting.

In other words, there are some general concepts that could be discussed here rather than just summarizing the background.

Submitter Information Verification

Submitter Full Name: TC ON FCO_AAA

Organization: TC on Fundamentals of Fire Control Within a Structure Utilizing Fire Dynamics

Street Address:

City:

State:

Zip:

Submittal Date: Tue Jan 24 11:32:38 EST 2023

Committee: FCO-AAA

Committee Statement

Resolution: [FR-2-NFPA 1700-2024](#)

Statement: The technical committee recognized that this chapter should be labeled "Background" based on the content contained in it.



Public Input No. 4-NFPA 1700-2023 [Section No. 7.5.3.2.2]

7.5.3.2.2

Common life safety features may include the following:

- (1) Travel distances
- (2) Signage
- (3) Emergency lighting
- (4) Elevators
- (5) Fire Escapes

Statement of Problem and Substantiation for Public Input

Fire Escapes are an important life safety feature of Class III multiple dwellings

Submitter Information Verification

Submitter Full Name: Brian Jablonski
Organization: Fire Department City of New Yo
Street Address:
City:
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Submittal Date: Tue Apr 25 12:26:49 EDT 2023
Committee: FCO-AAA

Committee Statement

Resolution: FR-10-NFPA 1700-2024

Statement: Fire Escapes are an important life safety feature of Class III multiple dwellings



Public Input No. 5-NFPA 1700-2023 [Section No. 7.5.3.4]

7.5.3.4 Vulnerabilities of Type III Buildings.

Type III buildings may be protected with active sprinkler protection but in many occupancies there is no sprinkler protection, leading to catastrophic collapse very early in the event. Fire fighters must use extreme caution in these structures because of the likelihood of early structural collapse due to the effect of heat on unprotected structural components. Common vulnerabilities to Type III construction include the following:

- (1) Open floor plans, achieved by utilizing lightweight truss construction
- (2) Limited, unknown, or inconsistent building fire protection and life safety features
- (3) Ventilation issues (heat, smoke control)
- (4) Collapse zone consideration
- (5) Fire spread to adjacent separated spaces within the building envelop through penetrations, unprotected openings, interstitial spaces, and so forth
- (6) When present, fire sprinkler systems for residential occupancies might not provide coverage in concealed combustible spaces, such as attics
- (7) Difficulty completing 360 degree survey due to construction features, size of building footprint, possible absence of alleys to rear.

Statement of Problem and Substantiation for Public Input

A key weakness of these buildings in terms off Firefighting is the difficulty of completing a 360 degree survey early on in the operation. Obstacles to this include the size of the building, adjoining buildings directly adjacent with no alley ways to the rear. It can be difficult to determine what floor a fire in the rear apartments is on without this early survey. This is especially dangerous when dealing with basement fires where the only access is via the interior or a walk out basement exit in the rear.

Thank you for you consideration.

Submitter Information Verification

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Submittal Date: Tue Apr 25 12:29:46 EDT 2023
Committee: FCO-AAA

Committee Statement

Resolution: FR-11-NFPA 1700-2024

Statement: A key weakness of these buildings in terms off Firefighting is the difficulty of completing a 360 degree survey early on in the operation. Obstacles to this include the size of the building, adjoining buildings directly adjacent with no alley ways to the rear. It can be

difficult to determine what floor a fire in the rear apartments is on without this early survey. This is especially dangerous when dealing with basement fires where the only access is via the interior or a walk out basement exit in the rear.

Thank you for you consideration.



Public Input No. 1-NFPA 1700-2023 [Section No. 10.5.5.5]

10.5.5.5 Alternative Technique.

The following are techniques for direct fire control:

- (1) An indirect attack.
- (2) ~~Switching to a fog pattern may improve coverage and reduce water damage.~~
- (3)

Statement of Problem and Substantiation for Public Input

Fog patterns should not be used for interior fire attack. Water damage should not be harped on, putting the fire out so we can ensure nothing else is burned should be the priority.

Submitter Information Verification

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Submittal Date: Mon Jan 09 11:36:06 EST 2023
Committee: FCO-AAA

Committee Statement

Resolution: [FR-25-NFPA 1700-2024](#)

Statement: The technical committee identified a number of changes related to the application of water in fire control. A key aspect is occupant survivability in the accomplishment of fire control. Additional "safety considerations" are added. The technical committee recognizes that a flow and move with a wall, ceiling, wall (arc) hose stream application was more effective and easier to teach and implement than pulsing.



Public Input No. 2-NFPA 1700-2023 [Section No. 10.6.5]

~~10.6.5 – Positive Pressure Attack (PPA):~~

~~10.6.5.1 – Tactical Objectives:~~

~~The primary objective is to improve interior tenability conditions for advancing crews and trapped occupants. Additional objectives include purposeful direction of the flow path, extinguishment, and property conservation.~~

~~10.6.5.2 – How It Works:~~

~~Fans are used to create a pressure differential influencing the flow of smoke, air, heat, and flame from the inlet to the exhaust.~~

10.6.5.3 – Tactical Considerations:

The following are tactical considerations for positive pressure attack:

- (1) Staff controlling operation of the fan should have a radio to coordinate operations (e.g., change speed, angle) if adverse conditions develop.
- (2) Staff controlling exhaust should have a radio to coordinate operations if adverse conditions develop.
- (3) Bringing a line to the exhaust(s) for protection should be considered.
- (4) Fan activation should be communicated and the structure for negative effects should be continuously monitored.
- (5) Transitional attack may be utilized, if possible, prior to fan activation.
- (6) Fire growth due to ventilation must be reduced by applying water on the fire during fan operation.
- (7) PPA in domestic floor plans with many rooms and closed doors (compartmented) is more effective.
- (8) PPA will not be effective on a fire located in an open floor concept plan or any floor plan with high ceilings.
- (9) Source fire must be near or adjacent to an exterior outlet.
- (10) It should be understood that the inlet is the opening to the fire compartment, and not necessarily the exterior door.
- (11) During PPA, creating additional openings not in the fire room will create additional flow paths, making PPA ineffective with the potential to draw the fire into all flow paths.
- (12) An exhaust larger than the inlet must be provided in the fire room to allow for effective PPA.
- (13) PPA should be coordinated with exhaust.
- (14) During PPA, an ongoing assessment of inlet and exhaust flow is imperative to understanding whether or not a fan flow path has been established and if conditions are improving/effective.
- (15) The setback of the fan or development of a cone of air is not as important as the exhaust size.
- (16) The application of water, as quickly as possible, whether from the interior or exterior prior to initiating PPA will increase the likelihood of a successful outcome.
- (17) PPA is not a replacement for using the reach of your hose stream.
- (18) During PPA, extension into void spaces when using PPA is directly related to the exhaust capabilities of the void space.
- (19) PPA does not negatively affect the survivability of occupants behind a closed door.

10.6.5.4 – Preferred Technique:

Exhaust ventilation should be established prior to mechanical ventilation at the inlet. The exhaust should be larger than the inlet. Interior advancement techniques can be used as appropriate, followed up by timely fire control.

10.6.5.5 – Alternative Technique:

Positive pressure ventilation or positive pressure isolation might be used as an alternative technique to PPA.

10.6.5.6 – Safety Considerations:

The attack team should coordinate and communicate with the IC and fan and exhaust control personnel. The assessment of inlet and exhaust must be continuous for adverse conditions. Rapid fire growth should be anticipated if ventilation is increased absent the application of water for both planned and unplanned ventilation. Consideration should be given to wind speed and direction.

Statement of Problem and Substantiation for Public Input

PPA is misused and not understood enough in the majority of departments who would utilize this document. Video after video of PPA shows poor tactics and bad outcomes.

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Submittal Date: Mon Jan 09 11:43:25 EST 2023

Committee: FCO-AAA

Committee Statement

Resolution: [FR-24-NFPA 1700-2024](#)

Statement: The technical committee added text to put into context to why you might choose this tactic. Due to limited water or potentially limited access. The TC also added text to clarify the role of the fire compartment confinement for indirect attack to be successful and provided an example. The TC modified tactical considerations to emphasize the need for fire compartment confinement and deleted the concern over water damage. The TC modified “how it works” sections of PPA and PPV to differentiate the two tactics and to align with the definitions of both tactics. The TC replaced ‘transitional attack’ with ‘exterior fire control’ for consistency.